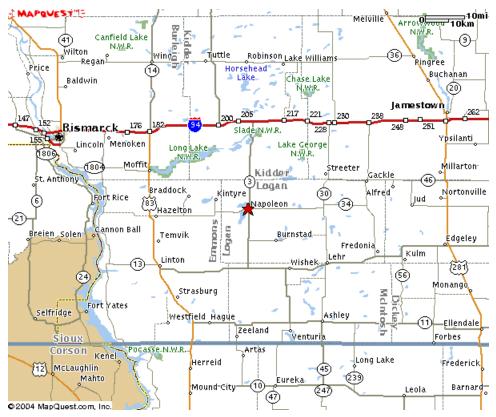
Labor Availability Study

The Community of Napoleon and the Surrounding Area



A collaboration of:

North Dakota Department of Commerce

University of North Dakota – Social Science Research Institute

Job Service North Dakota

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Major Findings

Summary of Findings

Site developers, economic planners, and others will often refer to the unemployment rate to determine if there is an available labor force, but while the unemployment rate is consistent measure across the country, it is incomplete. Being unemployed is defined as not working but actively seeking work. However, some individuals who are working would be interested in changing jobs or occupations, others would want additional hours, and some are planning to find work within the year. These individuals are not normally counted as part of the available labor pool in an area. In 2004, the state of North Dakota, in cooperation with local partners, funded a study to measure the available labor pool.

In the area including and surrounding the community of Napoleon, there exists a potential labor force of 3,750 individuals, or approximately 28 percent of the adult population. The majority of these individuals are currently working, but would be willing to consider alternative jobs. The labor force (those employed and unemployed) is estimated to be 70 percent of the adult population, or 9,420 individuals.

Characteristics of the Potential Job Seekers

	<u>Number*</u>	<u>Percentage</u>
Potential Job Seekers**	3,750	27.9
Actively Seeking Work	420	3.1
Planning to Look Within the Year	240	1.8
Interested in Changing Jobs	2,460	18.3
Interested in Additional Jobs	990	7.4
Those Discouraged From Looking	380	2.8

^{*}Rounded to the nearest 10.

^{**}The numbers will not total to the Potential Job Seekers, as duplication is possible.

Introduction

Scope of the Study:

During the spring of 2004, the state of North Dakota sponsored a study to identify the available labor force in those communities and counties that provided matching funds to conduct a labor availability survey. This was done in collaboration with the Workforce Development Division of the North Dakota Department of Commerce, Job Service North Dakota, the Social Science Research Institute (SSRI) at the University of North Dakota, and the Napoleon Development Corporation.

The purpose of the survey was to explore the potential labor force in and around Napoleon, located in the south central portion of the state. A questionnaire was designed

to identify the characteristics and the size of the potential labor force in that area. A telephone survey was conducted by the SSRI, who contacted 1,304 respondents.

The core area for this survey included respondents from McIntosh, LaMoure, Logan, Emmons, and Kidder Counties. These areas were included because of established commuting patterns to and from Logan County. The adjacent map indicates the geographic area included in this report.



Potential Job Seekers

Definitions of Potential Job Seekers:

At the time of the study, Job Service North Dakota reported the unemployment rate for the Logan County was at 4.8 percent. The study focused only on adults 18 years and older. That focus is different from the defined labor force used by the U.S. Department of Labor and the Census Bureau, which use 16 years and older. In order to be considered unemployed, one has to be not working and actively seeking work. However, the potential labor pool includes not only those who are actively seeking work, but also those who are working and may be interested in working for another firm. In this survey, the identified Potential Job Seekers (PJSs) were divided into five categories:

1. The unemployed

Those who are 18 and older, unemployed, and actively seeking work.

2. Individuals who plan to seek a job within the next year

Those who are not working, not seeking work, but plan to be looking for work within the year would be included in this category.

3. People who are working, but would be willing to change jobs

Using Bureau of Labor Statistics definitions, these people would be classified as employed. This group includes those individuals who are presently working who may or may not be actively seeking work, but would consider changing employers.

4. People who are currently working and are willing to take an additional job

Like the previous group, these individuals would be defined as employed. However, they would be willing to work an additional job and, as such, are part of the possible labor pool for different businesses.

5. Individuals who are discouraged and do not look for work

For the purpose of this study, the discouraged worker is defined as someone who is not working, is not actively seeking work nor planning to find a job within the next year, but would accept a job, if it met their minimum acceptable wage requirements.

Population Characteristics

General Population Characteristics:

Based on the 2000 Census, Logan County had slightly more females (50.4 percent) than males (49.6 percent). The adult population 25 and older is highly trained, with 66 percent of the population having completed high school, which is lower than the national average (80.4). Compared to the nation, the population of Logan County is less mobile, with 23.6 percent of the population residing in a different residence than the one where they lived in 1995. Nationally, 43.0 percent of the population moved from their 1995 residence and lived elsewhere in 2000. The median age for the general population in Logan County is 46.4 years of age.

According to the Logan County Economic Development Corporation, the labor market area for Logan County extends beyond its borders. The U.S. Census reported 12,972 individuals 18 years or older who lived in the area identified.

Sample Population Characteristics:

The sample gathered for the Napoleon area closely mirrors the general population characteristics. The sample reported more female respondents than males, 52.2 to 47.8 percent. This is within the acceptable range of plus or minus 5 percent. In addition, the unemployment rate, defined as those who are not working and actively seeking work reported by the study, was 3.1 percent, which is slightly lower than the reported unemployment rate for the area. The median age of the respondents was 54.5 years of age.

Employment Status:

According to the survey, about 41.5 percent of the adult population, or approximately 5,380 individuals, are currently working for wages in the Napoleon labor market area. Within the Napoleon area there are approximately an additional 2,050 people who are self-employed.

Active Labor Force:

The active labor force includes 5,380 individuals working and 420 who are actively seeking work, for a labor force of 5,800.

Inactive Labor Force:

The inactive labor force includes those who are planning to look for work within the next year (240 individuals), as well as those who are discouraged from seeking work (380 individuals). These individuals are not included in the unemployment rate, as they are not working or actively seeking work.

Characteristics of the Employed Labor Force

Employed Workers:

The 5,380 employed in the Logan County labor market area work an average of 39.7 hours a week. Those involved in farming and agricultural production were most likely to work longer hours than any other group (44.6 hours per week). Those involved in the service occupations (those who prepare or serve food, maintain buildings or grounds, provide personal care or protective services) worked the fewest average hours, 34.6 hours per week. This is an indication of the larger percentage of part-time jobs in those occupations. The following table reports the average hours worked by occupational group.

Average Hours Worked by Occupations

Occupational Group	Average Hours Worked
Managerial, Professional and Related Occupations	39.5
Service Occupations	34.6
Sales and Office Occupations	38.4
Farming and Related Occupations	44.6
Construction, Extraction and Repair	44.3
Production, Transportation and Material Moving	44.2
Other Occupations not Classified Elsewhere	39.3

Age Distribution:

The median age for those who are working is 44. As shown in the following table, the youngest occupational groups are comprised of those involved in service occupations and production, transportation, and material moving, with a median age of 41. The oldest group, with a median age of 48, is those who work in Other Occupations not Classified Elsewhere.

Median Age of Occupations

Occupational Group	Median Age
Managerial, Professional and Related Occupations	44
Service Occupations	41
Sales and Office Occupations	45
Farming and Related Occupations	45
Construction, Extraction and Repair	44
Production, Transportation and Material Moving	41
Other Occupations not Classified Elsewhere	48

Educational Attainment:

The typical worker has at least some college, but this varies as some occupations have differing levels of required education and training. Those in the occupational group of managers, professionals, and related occupations generally have obtained a college degree. Other occupational groups typically have some college, but not necessarily a degree.

Current Occupation:

The largest occupational group for the Napoleon labor area consists of managerial, professional, and related workers. The following table shows the number of employed by occupational group.

Occupations of Those Employed

Occupations of Those E	mpioyeu	
Occupational Group	Number*	Percentage*
Managerial, Professional and Related Occupations	2,280	40.2
Managerial	330	5.8
Business and Financial Operations	260	4.5
Computer and Mathematical	30	0.6
Architecture and Engineering	20	0.4
Life, Physical, and Social Science	10	0.2
Community and Social Services	140	2.4
Legal Occupation	50	0.9
Education, Training and Library	650	11.4
Arts, Design, Entertainment, Sports and Media	30	0.6
Healthcare Practitioner and Technicians	170	3.0
Healthcare Support	590	10.4
Service Occupations	920	16.3
Protective Service	60	1.1
Food Preparation and Serving	430	7.6
Building and Grounds, Cleaning, Maintenance	160	2.8
Personal Care	270	4.8
Sales and Office Occupations	1,160	20.3
Sales	270	4.5
Office and Administrative Support	890	15.8
Farming and Related Occupations	330	5.8
Farming and Related Occupations	330	5.8
Construction, Extraction, Installation and Repair	370	6.4
Construction and Extraction	100	1.7
Installation and Repair	270	4.7
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Occupational Group	<u>Number*</u>	Percentage*
Production, Transportation and Material Moving	450	8.0
Production	270	4.8
Transportation and Material Moving	180	3.2
Other Occupations not Classified Elsewhere	170	3.0
Other Occupations not Classified Elsewhere	170	3.0
* Rounded data		

Trained in Another Occupation:

Of those currently working, 40 percent are working in an occupation different from the one in which they received training. About 47 percent of those who are working in clerical and sales were trained as professionals, technicians, and managers. In addition, 29 percent of the managerial, professional, and related occupations were working in occupations other than the one in which they were trained.

Longevity with Current Employer:

The one group who had the longest tenure with their current employer was those who work in manager, professional, and related occupations, with a median of 8 years. Those involved in production and transportation occupations have the shortest tenure with their current employer (3 years). These occupations also have the shortest workweek.

Current Wage:

Overall, the typical wage for this area is \$10.30 per hour. As an occupational group, the highest median (typical) wage is found among managerial, professional, and related occupations with a wage of \$13.00 per hour. The lowest paid occupational group was involved with service occupations (\$7.00 per hour).

Wages of Those Employed

Occupational Group	Average/Mean	Typical/Median
Managerial, Professional and Related Occupations	\$14.72	\$13.00
Service Occupations	8.40	7.00
Sales and Office Occupations	10.66	9.50
Farming and Related Occupations	10.46	9.00
Construction, Extraction and Repair	13.79	13.00
Production, Transportation and Material Moving	11.77	10.43
Other Occupations not Classified Elsewhere	12.19	10.50

Job Service North Dakota conducts other surveys that collect information on wages. The Napoleon labor market area includes the Napoleon Metropolitan Statistical Area. When comparing wages, those wages reported in the labor availability survey are consistent with the wage information gathered from employers.

Current Commute Distance:

The occupational groups likely to commute the furthest were those people involved in the production and transportation occupations, with an average commute of 15 miles. The group that makes the shortest commute was made up of those who work in farming or related occupations, with a commute of 1.5 miles. The furthest distance reported to travel to work was over 100 miles.

Characteristics of the Available Labor Force

Available Workers:

Those individuals looking for work, planning to seek work, or would consider a different or alternative job were defined as being part of the available labor force. According to the survey, there were 3,750 individuals available for work in the Logan County area.

Work Status:

The majority of the available labor force is currently employed. Of the available labor force, 72 percent, or 2,710 individuals, are currently working. The majority of the available labor force (78 percent) is interested in working at jobs on a year-round basis. About 150 people, or 23 percent of those who are working part-time (defined as less than 30 hours), would like to work on a full-time basis.

Additional Employment:

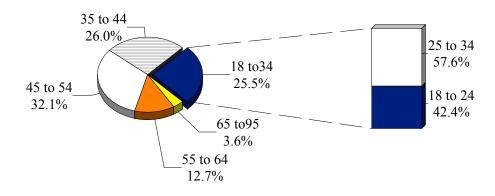
According to the survey, about 990 individuals are willing to take on an additional job. Some of these would also be willing to consider a different employer, depending on wages, benefits and working conditions.

Available for Work in the Next Year:

Approximately 240 individuals reported that they plan to seek work within the next 12 months.

Age Distribution:

Of the available labor force, approximately 960 individuals, or 25.5 percent, are under the age of 35.



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Educational Attainment:

Approximately 21 percent of the available labor force are graduates of a post-secondary program of study.

Educational Attainment of the Available Labor Force

Educational Attainment	Number*	Percentage*
Below HS Diploma or GED	360	9.7
HS Diploma or GED	1,460	39.0
Some College/Vo-Tech	930	24.6
Vo-Tech Graduate	220	5.8
College Degree	640	17.1
Advanced Degree	<u>140</u>	<u>3.8</u>
Total	3,750	$10\overline{0.0}$
*Rounded Data	,	

Last Held Occupation:

The following table shows the estimated number of individuals who reported their current job classification.

Current Occupation of the Available Labor Force

Occupational Group	Number*	Percentage*
Managerial, Professional and Related Occupations	950	37.6
Service Occupations	350	13.9
Sales and Office Occupations	570	22.4
Farming and Related Occupations	120	4.9
Construction, Extraction and Repair	150	6.1
Production, Transportation and Material Moving	280	11.0
Other Occupations not Classified Elsewhere	<u>100</u>	<u>4.1</u>
Total	$2,\overline{520}$	$10\overline{0.0}$

^{*} Rounded data

Occupations Trained In:

Approximately 1,230 people were trained in an occupation other than the one in which they are or have been working.

Additional Occupations in which the Available Labor Force Have Trained

Occupational Group	Number*	Percentage*
Managerial, Professional and Related Occupations	470	38.3
Service Occupations	160	12.8
Sales and Office Occupations	250	20.1
Farming and Related Occupations	60	5.4
Construction, Extraction and Repair	130	10.7
Production, Transportation and Material Moving	100	8.0
Other Occupations not Classified Elsewhere	<u>60</u>	<u>4.7</u>
Total	$1,2\overline{30}$	$10\overline{0.0}$

^{*} Rounded data

Minimum Acceptable Wage:

Lowest Acceptable Hourly Wage of Those Currently Working

	Minimum Acceptable
<u>Occupation</u>	Average Wage
Managerial, Professional and Related Occupations	\$10.11
Service Occupations	7.54
Sales and Office Occupations	8.76
Farming and Related Occupations	8.69
Construction, Extraction and Repair	12.37
Production, Transportation and Material Moving	9.65
Other Occupations not Classified Elsewhere	9.78

The median minimum acceptable wage for the available labor force was \$9.00 per hour.

Maximum Distance Willing to Commute:

Those in farming and related occupations are willing to travel the furthest for a job, with a median distance of 50 miles. The typical distance for the available labor force was around 30 miles or 30 minutes.

Benefits Desired:

The most desired benefit for potential workers was health insurance. This pattern was consistent for all occupational groups. Other benefits desired include retirement, paid vacation, and sick leave.

Main Factor Influencing Decision to Change Jobs:

The single most important factor to entice someone to work at a different job other than his or her current occupation was pay, with 54 percent citing that factor. The other two most important factors that would influence a person's decision include benefits (15 percent) and career advancement (9 percent).

Work Schedule Preference:

The majority of the available labor force would like some ability to have a flexible schedule at work. The majority would prefer to work 40 hours a week and to work during the daytime.

Education and Training Willingness by Age Distribution:

The available labor force is well trained, with 38 percent receiving training within the last three years. The type of training included: basic skills, product or sales information, interpersonal skills, how to be better organized, quality improvement, technical skills, and safety.

The available labor force is willing to be trained, if needed, for a different job. However, they would prefer to have on-the-job training, in part to take care of their existing financial responsibilities. Generally speaking, the longer the training, the fewer people who would consider that training. The most popular form of training desired is on-the-job training, with almost 70 percent of the available labor force opting for that method.

Type of Company Desired by the Available Labor Force:

The majority of the available labor force would like to work for a business involved in information and computer technology. The least desired firms are those involved in engineering. The following table reports the desirability of different types of companies.

Industry That is of Interest to the Available Labor Force

	Percentage of
<u>Industry</u>	<u>Available Labor</u>
Information Computer Technology	67.6
Health Services	53.8
Engineering	29.7
Manufacturing	48.6
Business Services Operation	66.8
Machine Trades or Construction	32.4

The desirability of a particular firm is dependent on the skill sets of the available labor force. For example, of those who have a college degree or higher, about 62 percent would like to work for an information technology firm. This same group would be the least willing to work for a firm involved in construction (18 percent).

Interest for Specific Industries by Educational Attainment of Available Labor Force (Percent)

	No HS	HS Graduate	Some Schooling	Vo-Tech	4 Yr College Degree or
<u>Industry</u>	Diploma	or <u>(GED)</u>	Post HS	Graduate	<u>Higher</u>
Information/Computer					
Technology	51.4	71.6	73.0	71.4	61.8
Health Services	62.9	58.9	56.8	28.6	46.1
Engineering	20.0	37.6	26.1	47.6	19.7
Manufacturing	40.0	58.9	51.1	47.6	32.9
Business Services					
Operation	57.1	64.5	75.0	71.4	67.1
Machine Trades or					
Construction	45.7	39.7	27.3	38.1	18.4

Technical Skills of the Available Labor Force:

The available labor force has a variety of skills it can bring to the workplace. The typical manager had over seven years of experience.

About half of the available labor force (45 percent) reported having experience with office suite software.

Self-Reported Proficiency of Various Computer/IT Skills (Percentage) of Potential Job Seekers

Technical Skill	Not <u>Skilled</u>	Some <u>Skills</u>	<u>Average</u>	Above Average	Very <u>Skilled</u>	No <u>Answer</u>
Word Processing	1.4	3.3	17.6	15.4	8.0	54.3
Using Spreadsheets	5.5	10.4	16.2	8.8	4.7	54.4
Using Databases	6.6	9.9	15.7	9.3	4.1	54.4
Using Desktop Publishing	10.7	6.6	12.4	12.4	3.6	54.3
Computer Programming	5.5	3.3	1.4	1.1	0.5	88.2
HTML Programming	4.7	2.5	1.9	1.4	1.4	88.1
Installing Computer Hardware	0.8	2.5	3.3	3.0	2.2	88.2

Characteristics of the Discouraged Workforce

Characteristics of the Discouraged:

According to the survey, about 380 people would be defined as discouraged workers. A discouraged worker is someone who does not have a job, is not looking for a job, and is not planning to look for a job, but knows what pay would encourage them to become a part of the labor force.

The median age of the discouraged workers is 48, which is older than those who are currently working (44). The most common barrier for these people to seek work is working on a family farm and/or being self-employed. The lack of child care was a barrier for approximately 3 percent of the discouraged population.

The discouraged workers, as a group, have slightly lower levels of education when compared to other members of the available labor force. Approximately 8 percent of the discouraged have a college degree or higher. If training is required, 62 percent would like on-the-job training.

This group does not have a great deal of experience as employees, with almost 68 percent having not worked for an employer within the past two years.

The average minimum acceptable wage for the discouraged is \$10.31 per hour. The discouraged workers were more likely to want to work year-round. The average distance the discouraged worker is willing to travel to work is 32 miles.

Benefits Desired:

Discouraged workers desire health insurance, followed by retirement contributions and paid vacations. Flexible scheduling was also highly desired.

The industry that appealed to the discouraged workers was manufacturing, which is similar to that of the rest of the available labor force. However, the least desirable industry was firms involved in health services.

Percentage of Discouraged Workers Interested by Industry

<u>Industry</u>	Percentage
Information/Computer Technology	48.6
Health Services	24.3
Engineering	33.3
Manufacturing	58.3
Business Services Operation	44.4
Machine Trades or Construction	38.9

How the Study Was Done

Target Population:

The target population was defined as adults 18 years of age or older, who had a working residential telephone number, and resided in the Napoleon labor market area. The adult with the most recent birthday in the household was asked to complete the survey.

Target Labor Market County Area Sample Sizes:

The sample was drawn at the county level and provides an accuracy at plus or minus five percent with a 90 percent confidence level. The samples are distributed in proportion to the total adult population age 18 or older.

Field Period:

The survey data were collected February 17, 2004, through April 17, 2004.

Sample Design:

Information about how survey samples are developed is important in assessing the validity and reliability of the results of the survey. While a fully random design is the most desirable approach in developing a representative sample of the population, this approach often results in under-sampling demographic groups with low rates of telephone ownership. These groups most often include young adults, minorities, and individuals with low education and income. Increasingly, researchers use stratified random designs to guard against under-sampling. To determine whether a representative sample was obtained, it is helpful to calculate the response rate for the sample as a whole, as well as to examine how closely the sample matches the known demographic characteristics of the population. If substantial differences are detected, post-stratification weights can be applied during analysis to ensure that the results of the survey can be generalized to the larger population.

To obtain a representative sample for the labor market survey, random selection of households and random selection of respondents within households by county were used during the data collection process. The survey of adults (17 or older) performed by SSRI was conducted by telephone. A random sample of 10-digit telephone numbers was generated for each county labor market area utilizing Genesys Sampling Systems Random Digit Dialing (RDD) in-house software. The list from which the numbers were drawn included only selected North Dakota telephone banks (that is, blocks of 1,000 consecutive numbers) that had been determined to contain a threshold number of active residential numbers.

Overall, SSRI called 9,535 numbers in the selected labor market counties to determine whether each was a working residential number in contrast to a nonworking number, a commercial/business line, a cell phone, data or fax line, or a non-primary household telephone. SSRI staff classified 2,717 of these numbers as working residential numbers eligible for interview and successfully interviewed 1,787 of these households. Throughout the study, completed interviews were monitored to determine whether the county samples matched population estimates in terms of gender and the age distribution of North Dakotans aged 18 or older.

Response Rates:

Survey professionals in general have found that response rates for telephone surveys have declined in recent years. These declines are related to the proliferation of fax machines, answering machines, blocking devices and other telecommunications technology that make it more difficult to identify and recruit eligible individuals. These declines are also related to the amount of political polling and market research that is now done by telephone and to the higher likelihood that eligible households will refuse to participate in any surveys. The consequence has been that response rates for telephone surveys are now calculated in several different ways, although all of these approaches involve dividing the number of respondents by the number of contacts believed to be eligible. Differences in response rates result from different ways of calculating the denominator, i.e. the number of individuals eligible to respond. The most conservative approach is one adopted by the Council of American Survey Research Organizations (CASRO). The CASRO method uses the known status of portions of the sample that are contacted to impute characteristics of portions of the sample that were not reached. The CASRO method of calculating the response rates for the overall project yields an average completion rate of 66.6 percent. The following table shows the dispositions as well as the CASRO response rates by county for the drawn sample.

Response Rate by County for the Napoleon Area

County	<u>C</u>	$\overline{\mathbf{NW}}$	<u>NP</u>	<u>B</u>	<u>R</u>	<u>T</u>	HCNI	CASRO
Logan	242	709	25	5	64	5	43	68.4%
Kidder	246	1,952	37	5	49	13	55	67.8%
Emmons	255	527	36	3	61	2	73	65.2%
Burleigh	270	502	87	8	63	4	77	65.2%
McIntosh	251	1,149	19	3	65	7	64	64.9%
Stutsman	267	633	76	6	74	8	41	68.5%
LaMoure	<u> 256</u>	1,035	31	<u>4</u>	<u>70</u>	3	<u>55</u>	<u>66.7%</u>
Total	$1,\overline{787}$	6,507	311	34	446	$4\overline{2}$	$4\overline{08}$	66.6%

C Completed Interviews

Refused

R

NW Non-working telephone

T Terminated Interview

NP Non-Primary Household

HCNI Household Contacted Not Interviewed

B Language Barrier